



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,920	10/11/2005	Shoichiro Watanabe	043888-0399	6930

53080 7590 07/14/2011
MCDERMOTT WILL & EMERY LLP
600 13TH STREET, NW
WASHINGTON, DC 20005-3096

EXAMINER

ARCIERO, ADAM A

ART UNIT	PAPER NUMBER
----------	--------------

1727

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

07/14/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mweipdocket@mwe.com

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/552,920

Applicant(s)

WATANABE ET AL.

Examiner

ADAM A. ARCIERO

Art Unit

1727

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 15 June 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1 and 4-9.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

/Barbara L. Gilliam/
Supervisory Patent Examiner, Art Unit 1727

/ADAM A ARCIERO/
Examiner, Art Unit 1727

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's arguments with respect to independent claims 1 and 4 have been considered but are not persuasive.

Applicant's principle arguments are:

a) Applicant's present disclosure displays unexpected results which were not discussed nor suggested in the prior art. The unexpected results are found in Table 2 of the instant disclosure and shows batteries 8 and 9 where the Wp/Wn ratio is 2.3-2.4 has a significant effect on the capacity maintenance and Table 3 shows where the same batteries show a significant effect on the thermorunaway temperatures (claims 1 and 4).

b) Inoue does not teach the claimed ratio of Wp/Wn. It is well known in the art to keep the ratio of Wp/Wn above 2.2 and it would not be obvious to optimize the ratio below 2.2 (claims 1 and 4).

c) Goto et al. teaches away from using a lithium composite oxide as claimed in claims 1 and 4 as the positive active material (claims 1 and 4).

In response to Applicant's arguments, please consider the following comments:

a) Applicant's results provided in Table 2 are not consistent or commensurate with the scope of the claims. For example, Batteries 1-3 of Table 2 have a Wp/Wn value outside the claimed range, however, the capacity maintenance rates are consistent with the batteries which fall within the claimed range. Not all of the results are unexpected. Furthermore, the results are not found to be significant, for example in Table 2, batteries 16-17 and 24-25 display capacity results up to 76%, which is not significantly greater than Battery 29, which as a value of up to 80%. Inoue further teaches that it is obvious to optimize the ratio of the active materials for the same reasons as the prior art (capacity maintenance and safety). Comparing battery 3 to battery 4 in table 3, there does not appear to be a significant difference in the thermorunaway values when the end of charge voltage increases. Furthermore, the instant disclosure does not appear to provide any results commensurate in scope to the claimed invention in claim 4, wherein the positive electrode active material comprises two lithium transition metal composite oxides. Tables 4-6 provide positive active materials comprising only composite oxide B, not a combination of composite oxide A and B.

b) Inoue does not teach that it is well known to keep the Wp/Wn ratio above 2.2. Furthermore, Inoue et al. teaches the ratio for the contents of the positive active material and negative material, depending on the varieties of the compounds and formulations of the compositions, can be optimized so as to improve the capacity, cycle life and safety of the battery (col. 33, lines 36-59). Inoue et al. is teaching that said ratio is a results effective variable. The courts have held that optimization of a results effective variable is not novel. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

c) Goto et al. teaches of a lithium secondary battery comprising a positive active material comprising the compound represented by the general formula of $\text{LiCo}_{1-y}\text{M}_y\text{O}_2$; where $0 \leq y < 1$ and wherein M can be Al and Ni (paragraph [0039]). The prior art ranges taught by Goto et al. overlap the claimed ranges. The courts have held that in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) (claims 10 and 12). Furthermore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the battery of Inoue et al. with the positive active material of Goto et al., because Goto et al. teaches that the battery will exhibit a greater discharge potential (paragraph [0037]).